## **Transportation Alternatives for Drinkers**

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Drunk driving persists at stubbornly high rates despite continuing efforts to reduce its occurrence (Reed 1981; NHTSA 1985; National Commission Against Drunk Driving 1987). One of the most compelling explanations for this phenomenon is the observation that alcohol and automobiles have become such integral features of our society that drunk driving is virtually inevitable (Gusfield 1981; Mosher 1985; Ross 1987). If substantial reductions in drunk driving are to occur, dramatic changes must take place. Either drivers must sharply curtail their drinking, or ways must be found to stop intoxicated individuals from driving.

This chapter focuses on a class of prevention strategies that take the latter approach. These strategies share a philosophy of attempting to provide drinkers with safe transportation while requiring as little modification as possible in drinking practices. There is, of course, nothing new about informal efforts to find safe transportation for intoxicated individuals. Surely, efforts to help intoxicated individuals get home safely began long before the invention of the automobile. Today, incidents of hosts, fellow drinkers, sober associates, and police assisting intoxicated individuals in obtaining safe transportation have become part of our drinking lore, even though they have received little study. In contrast to these informal interventions, formal programs designed either to provide safe transport for individuals or to encourage informal actions appear to have originated only in the last few years. Unfortunately, they too have received almost no attention from researchers. These efforts to implement transportation alternatives for intoxicated drivers can be divided into two groups: (1) those in which the individuals participating in the drinking activity supply both vehicles and drivers—the designated driver tactic, and (2) those where neither vehicles nor drivers are typically provided by the individuals taking part in the drinking activity - the safe rides tactic.

## **Designated Drivers**

With a simple and inexpensive tactic, groups of drinkers can assure themselves that a sober driver will be available when needed. Before drinking commences, they determine the number of drivers necessary to transport the entire group. Then, that number of individuals in the group remain sober and drive all of the others. This tactic, the use of "designated drivers," has been championed by a diverse array of sources and is currently receiving wide dissemination through the mass media.

The tactic of drinkers designating individuals to remain sober and do the driving has great appeal. First, the tactic can be used in any setting where people drive together after drinking. For example, it can be employed in private homes, bars, sporting events, and restaurants. Second, underage youths can adopt the tactic without requiring the authority or approval of adults. Third, no cost need be associated with exercising the tactic. In fact, designated drivers save money by drinking nonalcoholic beverages. Even

when incentives are offered to designated drivers by drinking establishments, the cost of the incentives tends to be inconsequential. Fourth, if light drinkers or abstainers are unavailable, only the designated drivers need change their drinking behavior for the tactic to be successful. Other group members are free to drink in whatever way they choose.

Surprisingly, virtually no research has been done on the designated driver tactic. Nevertheless, even the sparse information that does exist reveals both the great potential and some important limitations of the tactic. The potential for widespread use of the designated driver tactic is apparent from the results of a 1987 Gallop Poll (Gallup 1987). Nearly all Americans (91 percent) who participated in social events where alcohol was available wanted the people with whom they associated to employ the designated driver tactic. Furthermore, results from another item in the survey suggested that ample numbers of individuals are willing to serve as designated drivers. Nationally, 78 percent of the individuals who visit settings where alcohol is served indicated that they would be willing, on occasion, to serve as a designated driver. Interestingly, drinkers were more inclined than nondrinkers to serve as designated drivers (84 percent versus 67 percent, respectively). Although the Gallop Poll indicated that most people approve of the designated driver concept, the question remains as to whether their favorable disposition translates into practice. How often and under what circumstances do groups of drinkers designate some of their members to remain sober and do the driving?

### **Informal Designated Drivers**

One of the advantages of the designated driver tactic is that formal programs are not necessary. Any group of individuals in any drinking environment can designate someone to remain sober and do the driving. Unfortunately, information about these "informal" designated drivers is even more scarce than about those who participate in formal programs. It consists of responses to a few survey items included in studies directed primarily at other aspects of the drinking/driving problem. For example, as part of an unpublished telephone survey that Wayne Harding and I conducted in 1987, people living in a Boston suburb were asked about the designated driver tactic. Respondents were randomly selected from a list of licensed drivers and then screened to produce a sample of 502 individuals who reported having used alcohol and having driven (not necessarily together) in each of the 2 past years.

To estimate use of the designated driver tactic, we asked respondents, "During the last 12 months, how many times were you part of a group of drinkers in which someone didn't drink so they could drive others in the group?" Over half (53 percent) of the entire sample indicated that they had been part of such a group. Eighty-four percent of the individuals who had been in such a group reported that it happened 12 or less times during the past 12 months (nearly half said 3 or fewer times). Another item asked how groups made the decision to use the designated driver tactic. Only 3 percent of the respondents reported that they had been in a group that was "encouraged by a bar or restaurant" to designate someone to remain sober and do the driving. This low figure fits with the finding reported below that formal programs produce few designated drivers. All other respondents reported that their groups made the decision to designate a sober driver on their own.

Snortum, Hauge, and Berger (1986) also conducted surveys bearing on use of the designated driver tactic for reducing drunk driving. They estimated that 12 percent of American groups of drinkers always appoint one person to remain sober to drive, while 42 percent of such groups never designate a driver to remain sober. In sharp contrast, 76 percent of Norwegian groups were estimated to always employ the designated driver

tactic, while only 4 percent never used it. Unfortunately, the findings were clouded by a 58-percent response rate in their U.S. sample and an unknown response rate in Norway.

## **Survey of Formal Designated Driver Programs**

In 1985, the National Highway Traffic Safety Administration funded a study specifically aimed at answering questions concerning designated drivers (Apsler et al. 1987). The major focus of the project became the examination of formal designated driver programs (DDPs) — systematic efforts by drinking establishments or organizations to actively promote the designated driver tactic. A "snowball" approach was employed in an effort to locate as many DDPs as possible throughout the United States. As various individuals and organizations were contacted, they identified some DDPs and suggested other individuals who might know of more. Ultimately, these sources produced the names of 431 alleged DDPs. To verify the existence of some programs and to learn more about them, we then began telephoning a geographically diverse sample of the programs that had been praised most highly by our sources. Telephone conversations were held with spokespersons from 37 operational and 3 defunct DDPs. Four of the 37 programs were also visited by the investigators.

A second series of phone calls was made to membership organizations, such as fraternal clubs, veterans organizations, and fraternities and sororities. Some of these organizations are notorious for the heavy drinking that takes place, yet virtually none appeared on the list of DDPs identified through the snowball survey. Fifty-four membership organizations randomly selected from seven major U.S. cities were contacted, resulting in five DDPs with whom extended conversations were held.

#### **Characteristics of DDPs**

The formal DDPs that were contacted tended to be similar in many ways, despite assorted variations. For example, most DDPs operated whenever the drinking establishment was open, though a few restricted the hours, and two operated only on holidays. All respondents claimed that the cost of operation for their DDP was minimal and inconsequential. All DDPs utilized some form of in-house publicity, such as posters, table tents, employee buttons, and promotion by the server or doorman. When publicity occurred in the mass media, it tended to be donated or consisted of news items. Over half of the DDPs stated that they had eligibility requirements for participation, usually in the form of a minimum group size that ranged from two to six people. One program also specified a maximum group size of six people, reasoning that larger groups would not fit in one automobile. Nearly all DDPs required that the designated driver abstain from alcohol, though some permitted the driver to have up to two drinks. All but two DDPs gave incentives to designated drivers, usually in the form of free nonalcoholic drinks. A few DDPs offered free food, and others gave coupons that could be redeemed in the future for free food or drinks. In many establishments, a patron wanting to obtain the incentive for becoming a designated driver had to approach the server and make the request. However, in roughly a third of the DDPs, one of the staff was expected to approach eligible parties with an explicit request that someone be designated as the sober driver. Once selected, the designated driver often received some form of identification, such as a button or hand-stamp.

#### The Number of Designated Drivers

It appears that few individuals are participating in the DDPs offered by drinking establishments. Precise figures were unavailable, since few establishments kept reliable records of the numbers of designated drivers, and none recorded the number of eligible

groups served. Nevertheless, estimates offered by drinking establishments provide at least a ballpark indication of the numbers involved. The majority of drinking establishments reported serving 20 or fewer designated drivers per week. A much more meaningful figure is, of course, the percentage of eligible groups in which someone served as a designated driver. Here the figures are even more tenuous, since only a few respondents made a guess at the number of eligible groups served by their establishment. Typically, less than 10 percent of the eligible groups participated in a DDP.

## Limited Appeal of the Designated Driver Tactic

The vast majority of Americans approve of the designated driver tactic and are willing, on occasion, to serve as a designated driver. Yet existing evidence indicates that relatively few groups of drinkers in the United States actually employ the tactic. Part of the explanation may be that there are many circumstances in which serving as a designated driver is unappealing and/or impractical.

#### Who Will Abstain if Everyone Wants to Drink?

Individuals' willingness to serve as a designated driver is probably associated with their perception of how necessary drinking is for enjoying an activity. At sporting events, for example, beer drinking may be at least as important for some people (especially young males) as the contest. In such settings where drinking, particularly heavy drinking, is a central part of the experience, remaining sober may be seen by many individuals as too great a sacrifice. In principle, taking turns can make serving as the designated driver more palatable. But if group membership is fluid, equitable sharing of this role becomes difficult.

The designated driver tactic is likely to be unappealing in numerous other circumstances. For instance, when two people go out for drinks, will one of them drink alone? Social activities intended to bring together people who do not know each other well are another example in which drinkers might be reluctant to forego alcohol, since drinking is viewed by many as a social lubricant that facilitates meeting strangers. People who generally feel that alcohol helps them relax and become more outgoing may be unlikely to accept the handicap of not drinking. Problem drinkers are also poor candidates for the role of designated driver. Even people willing to remain sober may resist serving as a designated driver out of reluctance to transport a bunch of drunks. Who wants a car full of potentially belligerent individuals? Who will clean up the mess and get rid of the smell if someone vomits?

#### **Logistical Problems**

Even when individuals are willing to remain sober, they may often be reluctant to serve as a designated driver for logistical reasons. The designated driver tactic is most attractive only when the starting points of group members are geographically close and also when their ultimate destinations after drinking are near each other. It is unreasonable to expect one individual to drive long distances to pick up and drop off other group members. A compromise is for everyone to drive to a central location from which the designated driver ferries the group to and from the location where drinking occurs. This compromise does reduce the number of miles driven by the intoxicated members of the group. However, if intoxicated group members use the availability of a designated driver as justification for drinking more than they usually would, then their risk of a crash could be even greater than if they had drunk less and driven the entire distance themselves.

#### The Need for Planning

This last example points to another limitation of the designated driver concept: the need for organization and planning in advance of the activity. Once individuals have arrived in their own cars at the drinking location, it is probably too late in most circumstances to employ the designated driver tactic. Although it would still be possible for the drinkers to leave their cars at the drinking location and ride home with the designated driver, most people are probably reluctant to do so. Clearly, it is better to determine in advance who will attend an activity that will include drinking, how many vehicles will be needed, and who will drive. Timing is another critical aspect of the planning issue. The designated driver tactic requires all members of a group to arrive and depart at the same times. This extensive planning seems practical mainly in structured activities, such as staged events or regular social functions.

## Other Disadvantages of the Designated Driver Tactic

#### Resistance From Servers

Alcohol servers in the drinking establishments we visited explained that they receive smaller tips from groups with designated drivers. The nonalcoholic beverages that designated drivers drink are usually free, or if purchased, they cost much less than alcoholic beverages. Consequently, alcohol servers, who rely on tips for much of their income, suffer economically when they serve designated drivers, unless drinking establishments make arrangements to compensate them for lost tips. Obviously, without a subsidy, servers may be reluctant to encourage patrons to adopt the designated driver tactic, and we found no establishment that provided such a subsidy.

#### Reliance on an Honor System

In many drinking situations, the success of the designated driver tactic depends entirely on the commitment of both the designated driver and other members of the group. Even when alcohol servers and hosts encourage use of the tactic, they can do little to ensure either that designated drivers begin sober, remain sober, or that they do the driving. Servers typically must rely on buttons or hand-stamps to identify designated drivers, and these devices can easily be hidden by someone determined to obtain alcoholic beverages. Similarly, servers or hosts have no way to guarantee that the designated driver drives all members of the group. We did find rare instances in our study of DDPs when doormen would occasionally follow patrons into the parking lot to make certain that an apparently sober individual got behind the wheel. Nevertheless, even such extreme efforts can easily be circumvented.

#### Determination of "Sober"

While most formal DDPs do not serve alcohol to designated drivers, individuals employing the designated driver tactic informally are free to determine the degree of sobriety that the designated driver must maintain. A potential danger is that some groups will be mistakenly complacent as long as the designated driver is less intoxicated than the others, even if not completely sober.

#### **Excludes the Solitary Drinker**

By definition, the designated driver tactic works with a group of individuals – not with a single individual. Consequently, the tactic cannot help provide safe transportation for the solitary drinker.

#### Safe Rides

Another transportation-based approach for reducing alcohol-related automobile crashes is to provide both vehicles and drivers for intoxicated individuals who would otherwise drive themselves or ride with an intoxicated driver. This approach is usually referred to as "safe rides." Formal safe ride programs (SRPs) encompass a wide variety of transportation alternatives, such as taxicabs, limousines, tow trucks, buses, and automobiles, while the informal provision of safe rides generally relies on taxicabs and automobiles. Typically, when transportation is needed by an intoxicated person, either that person or someone else, such as a server or host, obtains transportation from outside the drinking environment. In some instances, contact is made directly with a company that provides the transportation, such as a taxicab company, while in others a communications service is contacted, and it, in turn, makes arrangements for transportation.

The safe rides tactic is a theoretically perfect solution to the drinking/driving problem. A primary attraction from a drinker's standpoint is that no modification of drinking behavior is necessary. No one need remain sober or even moderate his or her alcohol consumption, and still all drinkers can be transported home without endangering either themselves or others. In addition, the safe rides tactic works with solitary drinkers. Unlike the designated driver tactic, the safe rides tactic does not depend on the existence of groups of individuals.

The safe rides tactic appears to receive the same high level of approval that was found for the designated driver tactic. Caudill, Kaufman Kantor, and Ungerleider (1988) interviewed 1,522 patrons as they entered bars and nightclubs in Sacramento and San Jose, California. The survey was conducted to obtain baseline data for a study of SRPs. Nearly all of their respondents (96 percent) believed that the availability of SRPs would be useful; 63 percent of the respondents selected the number "10" on a 1-10 scale of usefulness. In addition, 79 percent of all respondents reported that they might use such a service if it were available. An even larger percentage of heavy drinkers, 87 percent, indicated that they might take advantage of a safe rides service. On the other hand, they also found that a large number of respondents (38 percent) had not heard about SRPs, and few had actually used one. Seven percent of all respondents and 12 percent of heavy drinkers reported that they had used the services of a SRP sometime in the past.

#### Informal Safe Rides

As in the case of the designated driver tactic, formal programs are not necessary for the safe rides tactic to be used. Intoxicated individuals do not need a SRP to use taxicabs or receive rides from sober friends in order to avoid drunk driving. However, this informal use of the safe rides tactic has received almost no attention from researchers. One exception is an ethnographic study of bar settings conducted by Gusfield, Rasmussen, and Kotarba (1984). They recount observing incidents in four drinking settings where bartenders would sometimes call a taxicab for intoxicated patrons wanting to avoid driving. The likelihood of bartenders assisting patrons in avoiding drunk driving depended largely on the relationship between patron and bartender. Furthermore, the authors noted considerable variation both among and within drinking establishments in bartenders' efforts to help patrons obtain a safe ride.

Hernandez and Rabow's (1987) study of interventions in drunk driving situations also provides information about the informal use of safe rides. They questioned 247 college student volunteers from an introductory sociology class to learn about incidents in which someone had tried to stop them from driving after drinking. Ninety-seven of the students reported experiencing such an incident. Most of the 89 reported interventions in which

someone drove the respondent home occurred at parties (49 percent), and a somewhat smaller portion (33 percent) occurred at friends' homes. Many fewer instances of respondents being driven home took place at either bars (12 percent) or restaurants (6 percent). The results of these two studies substantiate informal use of the safe rides tactic but obviously leave a great many questions unanswered.

## Survey of Formal Safe Ride Programs

In 1986, the National Highway Traffic Safety Administration funded a survey of SRPs (Harding, Apsler, and Goldfein, 1988a, b) that followed the same procedure described above for our earlier study of the designated driver tactic. First, leads on 515 SRPs across the country were obtained using a snowball survey. After information for 325 programs were verified, detailed data were collected on 52 programs (see Harding, Apsler, and Goldfein 1987 for a directory that summarizes key features of the 325 programs). Twelve of the 52 safe ride programs were then visited by the investigators.

#### **Characteristics of SRPs**

We found SRPs existing in communities ranging from small towns to large cities. They were operated by numerous types of organizations, including cab and bus companies, charitable organizations, trade associations, hospitals, government agencies, and non-profit organizations set up specifically for this purpose. Many operated year-round, often providing service every day of the week. Safe ride programs advertised themselves both through the local media and with signs in drinking establishments and other locations. Programs run by transportation companies typically used their own dispatchers and drivers, while other programs used various combinations of paid and volunteer staff. Often, SRPs were staffed largely by volunteers and operated in conjunction with a transportation company that provided the vehicles and drivers.

Even though nearly all programs provided their service at no cost to riders, the average annual cost of the year-round programs was under \$12,000. Most programs obtained funding from a wide variety of sources, the most common of which were donations in the form of free advertising from the media, member fees paid by drinking establishments and/or corporations, donations from alcohol distributors, and fundraising activities.

Most programs accepted requests for rides either from drinkers or someone calling for the drinker, while some took calls only from drinkers and others only from alcohol servers. Many programs screened riders to make sure they fit their requirements, such as whether the rider was intoxicated, drove his/her own vehicle to the drinking site, intended to go directly home, and whether the origin and destination fit within the program's operating range.

#### The Number of Riders

As was the case with DDPs, reports of the number of riders transported by SRPs must be interpreted with caution. For instance, some programs could only make estimates, and others could not separate the number of requests received from the number of rides provided. Nevertheless, about half of the programs reported delivering roughly 400 or more rides per year, and about a quarter delivered 1,000 or more rides per year. Unfortunately, almost no ride programs gave estimates for the size of the target population. Since SRPs tend to cover entire communities or large sections of major cities, the number of eligible intoxicated drivers within their operating boundaries could be quite large.

## **Disadvantages of Ride Programs**

#### Cars Are Usually Left Behind

Only a small percentage of SRPs (about 15 percent of those we contacted) transport drivers' cars or provide free transportation the next day to help drivers retrieve their vehicles. Obviously, some drivers may forgo a ride home knowing that they must leave their car behind. They may be concerned that returning home without the car will incriminate them; they may fear that their car will be stolen and/or vandalized if left overnight; or they may simply want to avoid the inconvenience of retrieving their car.

#### **Determination of Level of Intoxication**

With rare exceptions, SRPs rely on either the drinker or someone else at the drinking site to determine whether the drinker is too intoxicated to drive safely. Intoxicated individuals are notoriously incapable of accurately judging their level of intoxication, and research shows that even people who often observe intoxicated drivers, such as alcohol servers, tend to be poor judges of level of intoxication (Langenbucher and Nathan 1983). As a result, it may be the more cautious drivers who tend to seek out rides for themselves, while observers, such as servers, may tend to single out only the most obviously intoxicated individuals for a safe ride home. Various devices, such as "Know-Your-Limit" cards and breathtesting machines, could easily be made available to patrons wanting assistance in judging their level of intoxication. Even so, it might still be only the more cautious individuals who would use these devices.

#### Potential for Abuse

People who are not intoxicated can easily take advantage of many SRPs, as can intoxicated individuals who do not have cars. In an effort to minimize abuse, some RSPs screen clients. For example, some take requests for rides only from servers as one way of insuring that riders are intoxicated, and some ask to see driver's licenses and keys as at least partial assurance that the rider would otherwise drive. However, no information exists about the prevalence of inappropriate use of SRPs. Staff in some programs also reported efforts to screen out individuals who made frequent requests for rides. Unfortunately, those individuals (often referred to by program staff as "alcoholics") may be the ones who present the greatest danger on the roads.

# A Special Case: Transportation to and From Drinking Locations

A rare variation of SRP transports drinkers in both directions—first bringing them to drinking locations and then taking them home from those locations. This "round trip" version of safe rides overcomes several important limitations of the "home-only" programs. For instance, the question of what to do about drinkers' cars disappears, since people do not drive their cars to the drinking locations. In addition, these SRPs make no attempt to determine level of intoxication, so the issue of abuse of the program disappears—anyone, intoxicated or not, can use these programs.

In those situations where the "round trip" SRP is practical, safe rides can become a nearly perfect solution to the drunk driving problem. The most common examples are special buses or trains that transport people to and from a scheduled event, such as a sporting event. Another variation occurs in Boston, where the mass transit system is kept

running later than usual on New Year's Eve to help transport the thousands of people attending events held in the downtown area. The problem with these versions of the safe rides tactic is that many drinkers may drive themselves home from the points where buses, trains, or subways deposit them. Another example of round-trip SRPs is the increasing popularity of limousine service on high school prom nights in some communities. If door-to-door service is provided, then there is obviously no driving after drinking.

The major obstacles to wider use of round-trip SRPs based on mass transit are the same ones that prevent wider use of mass transit in general. Given the widespread ownership of automobiles in most locations and the existence of an extensive highway system, mass transit cannot compete with automobiles on convenience and cost. Round-trip SRPs are a realistic option when (1) a large number of individuals live in relatively dense areas, and (2) they travel to drinking sites located in a relatively small geographical area. These conditions are typical of some college towns. Dormitories might be clustered in one area and fraternities and sororities in another, while many of the favorite drinking establishments congregate in one section of the nearby town. However, now that the legal drinking age has been raised across the country, most undergraduates cannot legally drink in drinking establishments. Consequently, there may no longer be sufficient traffic between campuses and drinking establishments to make round-trip programs practical.

## The Costs of Expanding Safe Ride Programs

If SRPs are to be more effective, they must transport more riders. Yet, it is not clear whether the existing sources of funds and/or volunteers could keep pace with a significant increase in the use of SRPs. The key, of course, is determining how much the ridership would increase if efforts were made to expand the role of SRPs. The answer to that question depends largely on the nature of the population of potential riders that is chosen as a target. For example, SRPs could transport anyone who wants a ride, or they could be restricted to intoxicated individuals. If riders must be intoxicated, then a level of intoxication should be chosen. The commonly used BAC of 0.10 percent is an obvious candidate, though a much lower level, such as the 0.05 percent BAC recommended by the American Medical Association (Council on Scientific Affairs 1986) must be considered. Will potential riders have to prove that they would drive if they are refused use the safe ride program? Will passengers trying to avoid riding with an intoxicated driver be transported, as is usually the case with existing SRPs? Will underage drinkers be transported? The maximum length of rides and permissible destinations of trips are other factors that markedly impact cost estimates. At present, little is known about how the number of eligible individuals would vary with the selection of different target populations. Nor is there information on the percentage of eligible people who might be persuaded to take advantage of SRPs.

At least two other types of costs must be considered in planning for broader use of safe rides programs. First, drinking establishments might have to increase their parking facilities to hold the cars that accumulate as their intoxicated drivers receive alternative transportation home. Second, the cost of transportation back to the drinking site at a later time for drivers to retrieve their cars must be included in the overall equation. These costs can be built directly into the SRPs by having them transport cars along with their drivers. For example, a few SRPs transport riders' cars with tow trucks or provide a second, sober driver.

On the other side of the cost issue is the question of who would pay for an expanded system of SRPs in the event that existing funding sources could not cover the costs. There are several possibilities. Additional expenses could be borne by those who obtain rides, or the costs could be spread across a larger population, such as all drinking estab-

lishments, all drinkers, or even across all taxpayers. Cost sharing, say between riders and drinking establishments, is another option.

Finally, an effort to markedly expand SRPs will almost certainly depend heavily on taxicabs. Consequently, it will have to contend with the 50-percent drop in the number of taxicabs and the 40-percent decline in taxicab operators that occurred over a recent 10-year period (Gilbert et al. 1984). On a more positive note, Teal (1985) reported on developments in the taxicab industry that may improve its financial health.

#### Conclusions

The designated driver and safe rides tactics comprise a class of transportation alternatives that help reduce the number of intoxicated drivers on our roads. Both tactics enjoy broad support from potential users and can be employed in virtually any drinking setting. Safe rides programs make even fewer demands on drinkers than the designated driver tactic and can be successful without advance planning. Hundreds of designated driver and safe rides programs have been established in a broad array of settings. They cost little to operate in their present forms and receive broad support from drinkers, drinking establishments, community organizations, activist groups, and the alcohol beverage industry. Yet, two key questions remain: (1) Just how much impact have the designated driver and safe rides tactics had so far in reducing numbers of intoxicated drivers? (2) What is their potential for making a further reduction?

Formal DDPs, according to reports of the programs themselves, produce relatively few designated drivers. While some people employ the designated driver tactic on their own, they may do so infrequently. Based on scanty results, the main effect of publicity about the designated driver tactic may be to encourage drinkers to ride with abstainers or light drinkers when such individuals happen to be available and willing to transport others. The most important disadvantages of the designated driver tactic are probably the need for planning and the existence of many circumstances where the tactic is unappealing to drinkers and/or logistically impractical.

Nationally, SRPs transport thousands of individuals each year. However, riders' levels of intoxication have not yet been documented, nor has the number who would have either driven or obtained a ride from an intoxicated driver in the absence of SRPs been verified. Furthermore, little is known about the numbers of eligible riders and the feasibility of markedly expanding the scope of SRPs. One likely obstacle to increasing ridership is the requirement in many SRPs that riders leave their cars at the drinking site.

The policy implications of existing data are that the designated driver and safe rides tactics should continue to be encouraged and supported with the clear understanding that these strategies are limited in what they can be expected to accomplish. Until additional research shows otherwise, it appears that these strategies are unlikely to fulfill what, at first glance, appears to be their enormous potential for reducing the numbers of intoxicated drivers.

Of the two strategies, the designated driver tactic is the more questionable. At present, the only prudent position is to remain extremely skeptical about the impact that it can have. In those circumstances when use of the tactic is both appealing and practical, it can be completely effective in eliminating intoxicated drivers from the roads. Research is necessary to determine how often those circumstances exist and to explore the possibilities for increasing the frequency with which they occur. Safe rides programs, especially when coupled with servers and hosts assuming the responsibility for detecting intoxication and ensuring the use of alternative transportation, can be extremely effective. Here, too, research is necessary to determine just how effective SRPs are in practice and how serious are the obstacles to their wider use.

Use of the designated driver and safe rides tactics could be increased by addressing some of the problems discussed above. For example, participation in the designated driver tactic could be bolstered by stressing the need for planning and encouraging drinking establishments to provide incentives for groups of drinkers who arrive in a single car and also participate in a DDP. More people would probably take advantage of SRPs if their cars were transported. Employers could help by following the lead of those who distribute coupons for a free ride to their employees, thereby making it increasingly difficult for them to justify driving while intoxicated.

#### Motivation Is a Key Factor

Ultimately, however, the prospects for expanded use of the two strategies may depend less on their specific characteristics than on the level of motivation among drinkers to avoid drunk driving. Both strategies are primarily procedures that can be employed by drinkers who are already motivated to avoid drunk driving. While publicity about DDPs and SRPs may reinforce concern with drunk driving and may trigger action when presented during drinking activities, it probably contributes relatively little to overall motivation.

Results from surveys cited earlier are consistent with this line of reasoning. For example, Snortum, Hauge, and Berger (1986) attribute the much greater use of transportation alternatives in Norway than in the United States to national differences in attitudes toward drinking and driving. They make no mention of differences between the two countries in either publicity about transportation alternatives or in availability of these services. Similarly, the discrepancy between American's widespread approval of both the designated driver and safe rides tactics and their infrequent use of the tactic points to lack of motivation as a likely explanation.

#### More Research Is Essential

The tentative conclusions presented here are largely speculative due to the paucity of data. Thus, the one clear message that emerges from the area of transportation alternatives for intoxicated drivers is the need for additional research. The scarcity of research is surprising given the central role that alternative transportation will have to play if drunk driving is to be substantially reduced. Drinking practices appear to be relatively immune to change. Consequently, the success of efforts to motivate people to avoid drunk driving will depend heavily on the availability of attractive and practical alternatives to driving.

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